What do we know about people with non-diabetic hyperglycaemia and the Diabetes Prevention Programme?
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Note: All results in this document are taken from the National Diabetes Audit: Non-Diabetic Hyperglycaemia and Diabetes Prevention Programme 2019-20 – England
The National Diabetes Audit: NDH and DPP measures the characteristics of people with NDH, the monitoring and interventions they have received, and the outcomes that followed.

**Non-diabetic hyperglycaemia (NDH)** is sometimes referred to as prediabetes or borderline diabetes. It means that your blood gluoses are higher than usual, but not high enough for you to be diagnosed with type 2 diabetes.

**The NHS Diabetes Prevention Programme (DPP)** identifies those at high risk and refers them onto a programme to help change behaviour and reduce the risk of developing type 2 diabetes. People are supported to maintain a healthy weight and be more active. These are things which together have been proven to reduce the risk of developing type 2 diabetes.

### The results

<table>
<thead>
<tr>
<th>NDH INCREASING</th>
<th>2017-28</th>
<th>2019-20</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>People diagnosed with NDH in England according to GP records.</td>
<td>1.3M</td>
<td>2.1M</td>
<td>24%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNAWARE OF BEING AT RISK OF TYPE 2</th>
<th>NEARLY</th>
<th>OF PEOPLE WITH A RECORDED DIAGNOSIS OF NDH</th>
<th>OF PEOPLE WITH A DIAGNOSIS OF NDH IN THE 2017–18 AUDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearly 5M of people with NDH in England.</td>
<td>NEARLY</td>
<td>50%</td>
<td>NEARLY</td>
</tr>
<tr>
<td>Of those don’t know they are at increased risk of developing type 2 diabetes.</td>
<td>Of people don’t receive their annual health care checks.</td>
<td>Of people have now developed type 2 diabetes.</td>
<td></td>
</tr>
</tbody>
</table>

### Annual healthcare checks

- Nearly 50% of people with a recorded diagnosis of NDH don’t receive their annual health care checks.
- Nearly 1/10 of people with a diagnosis of NDH in the 2017–18 audit have now developed type 2 diabetes.

It’s vital that people at high risk are identified so that they can receive the appropriate care and support to prevent or delay them from developing type 2 diabetes.

The DPP is a great step forwards in preventing people at high risk from developing type 2 diabetes. GP practices should offer referral to the DPP to everyone who is eligible and who would benefit from the programme.

While some risk factors for developing type 2 diabetes can’t be changed, with the right support people can change their BMI and blood glucose levels.

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**WE SAY**

- **Annual healthcare checks**: Nearly 50% of people with a recorded diagnosis of NDH don’t receive their annual health care checks. Nearly 1/10 of people with a diagnosis of NDH in the 2017–18 audit have now developed type 2 diabetes.

**Public Health England estimate of people with NDH in England.**

- 5M

**Nearly 1/10 of those don’t know they are at increased risk of developing type 2 diabetes.**

- 3M
Background

In July 2021, NHS Digital published the National Diabetes Audit: Non-Diabetic Hyperglycaemia and Diabetes Prevention Programme 2019-20 report. This report has been prepared by Diabetes UK and summarises the information in the report in a way that is more accessible for people with diabetes. This report is also for anyone interested in the care provided for people at risk of diabetes by the NHS in England.

About this report

Before writing this summary report, we talked to people with diabetes to find out what information they wanted to see and how to present the findings. At the back of the report we explain what the audit is and why it is important to look at the care that is provided to people with and at risk of diabetes. There is also a glossary and details of where to find more information.

The results

Non-diabetic hyperglycaemia (NDH)

What is non-diabetic hyperglycaemia?

NDH is sometimes referred to as prediabetes or borderline diabetes. It means that a person’s blood glucose levels are higher than usual, but not high enough for you to be diagnosed with type 2 diabetes. NDH is a warning sign that someone is at high risk of developing type 2 diabetes. The good news is they don’t have it yet, and there are lots of things people can do to prevent or delay type 2 diabetes from developing.

How many people are recorded as having NDH?

Over 2.1 million people in England have a diagnosis of NDH recorded in the GP records. The table below shows the increase of over 845,000 people with a recorded diagnosis of NDH since the first audit in 2017-18. The percentage of the population with a recorded diagnosis of NDH has also increased over this time.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-20</td>
<td>2.1 million</td>
<td>4.3%</td>
</tr>
<tr>
<td>2018-19</td>
<td>1.8 million</td>
<td>3.7%</td>
</tr>
<tr>
<td>2017-18</td>
<td>1.3 million</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Public Health England think that the real number of people in England with NDH is 5 million. This means that there is around 3 million people who do not know they are at increased risk of developing type 2 diabetes.
Do people with NDH receive the care they need?

NICE guidelines for people at high risk of developing type 2 diabetes say that:

‘People at high risk of developing type 2 diabetes should be offered a blood test and assessment of their BMI at least once a year.’

The results of this audit shows that only 56% of people with NDH receive these two healthcare checks annually.

This means that nearly half of people with NDH are missing out on these vital checks, which help to identify if someone has developed type 2 diabetes.

How many people with NDH have developed type 2 diabetes?

In 2017-18, the first of these audits identified nearly 1.3 million people had a diagnosis of NDH recorded in their GP records. Over 10% of these have now gone on to develop type 2 diabetes.

There are certain things (individual characteristics) about people with NDH which make them more at risk of developing type 2 diabetes than others. Some of these risks are thing that people can’t changed such as sex and ethnicity. But there are other risks such as BMI (how overweight someone is) that people can change with support.

### Individual characteristic

<table>
<thead>
<tr>
<th>Individual characteristic</th>
<th>Higher risk</th>
<th>Can this risk factor be changed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>No</td>
</tr>
<tr>
<td>Age</td>
<td>40–64 years</td>
<td>No</td>
</tr>
<tr>
<td>How many years they have had NDH</td>
<td>5-9 years</td>
<td>No</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Asian</td>
<td>No</td>
</tr>
<tr>
<td>Deprivation level</td>
<td>Most deprived level</td>
<td>No</td>
</tr>
<tr>
<td>Body mass index (BMI)</td>
<td>BMI of 30 or over (obese)</td>
<td>Yes</td>
</tr>
<tr>
<td>HbA1c (blood glucose level)</td>
<td>47-48 mmol/mol</td>
<td>Yes</td>
</tr>
</tbody>
</table>

WE SAY

GPBs should continue to identify people at risk of developing type 2 diabetes. Where people have a blood glucose level which means they have NDH, this diagnosis should be recorded in their clinical records.

All people with NDH should have the recommended health care checks every year which will help to quickly identify people who have gone on to develop type 2 diabetes.

Health services should support people with NDH to change those risks factors that can be changed to reduce the number of people developing type 2 diabetes.
The Diabetes Prevention Programme (DPP)

The Healthier You: NHS Diabetes Prevention Programme (DPP) identifies those at high risk of developing type 2 diabetes and refers them onto a behaviour change programme. It is a joint programme between NHS England, Public Health England and Diabetes UK.

People are supported to maintain a healthy weight and be more active. These are things which together have been proven to reduce the risk of developing type 2 diabetes.

90% of the 2.1 million people with NDH would have been eligible to be referred to take part in the Diabetes Prevention Programme. But the current data shows that the majority of people who could be supported by the DPP have not been referred.

To find out more about preventing type 2 diabetes, including the diabetes prevention programme, please visit the Diabetes UK website www.diabetes.org.uk/preventing-type-2-diabetes/prevention

To find out if you're at increased risk of developing type 2 diabetes you can complete the Know Your Risk tool https://riskscore.diabetes.org.uk/start

WE SAY

The DPP is a great step forwards in preventing people at high risk from developing type 2 diabetes. GP practices should offer referral to the DPP to everyone who is eligible and who would benefit from the programme.
Further information

What is the National Diabetes Audit?
The audit is a project that checks the quality of care provided to people with diabetes by GP practices and hospitals in England and Wales. The first audit took place in 2011 and has collected information annually since then about the quality of care for people with diabetes. Since 2011 the NDA programme has expanded to include NaDIA/NaDIA Harms (inpatient care), NPID (pregnancy care), NDFA (foot care) and NDTA (transition from paediatric to adult services).

Why do we audit care for people with diabetes?
The National Institute for Health and Care Excellence (NICE) produces guidelines for diabetes care. All GP practices and specialist diabetes services should follow these guidelines to provide good quality diabetes care. In the audit we check whether people with diabetes get the care and treatment recommended in the NICE guidelines.

The NDA supports improvements in the quality of diabetes care by enabling NHS services to:

- Assess local practice against NICE guidelines
- Compare their care and outcomes with similar services
- Identify gaps or shortfalls that are priorities for improvement
- Identify and share good practice
- Provide a comprehensive national picture of diabetes care and outcomes in England and Wales

The audit findings are publicly available, so you can see the results for your local GP practice or specialist service. You can find this on the NHS Digital website.
Where to go for more information

The National Diabetes Audit
Information about the National Diabetes Audit and copies of the full reports are available on the NHS Digital website

Diabetes UK
For more information about diabetes, including living with diabetes, go to www.diabetes.org.uk/guide-to-diabetes or call Diabetes UK’s Helpline on 0345 123 2399 for advice and support.

For information about getting involved in making a difference to diabetes treatment and care, go to www.diabetes.org.uk/get_involved/campaigning/diabetes-voices

To find out more about Diabetes UK’s activities in your area, go to www.diabetes.org.uk/in_your_area

National Institute for Health and Care Excellence (NICE) guidelines
For information about how NICE develops guidelines, go to www.nice.org.uk. Guidelines about diabetes care in hospital include:

  Diabetes in adults quality standard (QS6)
  NICE Guidelines NG19

Healthcare Quality Improvement Partnership (HQIP)
To find out more about clinical audits – and patient involvement in national clinical audits – you can visit the HQIP website at www.hqip.org.uk/involving-patients

Patient Advice and Liaison Service (PALS)
If you have a question about local health services or an enquiry about health matters, you can contact PALS. Find more information or your local PALS at www.nhs.uk

Community Health Councils (CHC) in Wales
If you need help and advice about NHS Services in Wales, you can contact CHC. Find out more at www.wales.nhs.uk

NHS Choices (England)
NHS Choices provides information about your health, including finding and using NHS Services in England. Find out more at www.nhs.uk/pages/home.aspx

NHS Wales
NHS Wales provides information about your health, including finding and using NHS Services in Wales. Find out more at www.wales.nhs.uk
Further information

Explanation of words used in this booklet

Audit
A way of gathering information and measuring local NHS organisations’ performance and quality of care against national guidelines, from which come recommendations for improvements.

Blood glucose
The main sugar the body makes from the food we eat. Glucose travels in the bloodstream, providing energy to all the body’s living cells. However, the cells cannot use glucose without the help of insulin.

BMI (body mass index)
A measurement of height and weight to see if you are a healthy weight.

Complications of diabetes
Harmful effects that may happen when a person has diabetes. These usually develop when a person has had diabetes for a long time. These include damage to the retina of the eye (retinopathy), the blood vessels (angiopathy), the nervous system (neuropathy), and the kidneys (nephropathy).

Studies show that keeping blood glucose levels as close as possible to those of a person without diabetes may help prevent, slow, or delay harmful effects to the eyes, blood vessels, kidneys, and nerves.

HbA1c
HbA1c tests measure overall blood glucose levels over the past 8 to 12 weeks.

NICE
The National Institute for Health and Care Excellence (NICE) is the independent regulatory body providing national guidance to the NHS on new and existing medicines, treatments, and procedures.

Type 2 diabetes
A condition in which the body either makes too little insulin, or cannot use the insulin it produces to turn blood glucose into energy. Diet and exercise is often enough to control a type 2 diabetes condition, but some people also need diabetes medication or insulin.
The National Diabetes Audit (NDA) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit (NCA) programme. The NDA is managed by NHS Digital, formerly known as the Health and Social Care Information Centre (HSCIC), in partnership with Diabetes UK and is supported by the National Cardiovascular Intelligence Network (NCVIN), Public Health England. The NDA receives invaluable support from people with diabetes, clinical staff and other health professionals across England and Wales.

NDA publications

**NDA: National Diabetes Audit**
- Care processes and treatment targets
- Complications and mortality
- Transition
- Type 1 diabetes
- Young people with type 2 diabetes

**NPID: National Pregnancy in Diabetes Audit**

**NDFA: National Diabetes Foot Care Audit**

**NaDIA: National Diabetes Inpatient Audit**
- NaDIA Harms

**NDH/DPP: Non-diabetic hyperglycaemia and Diabetes Prevention Programme audit**

We welcome your views on how we can improve this report

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